

SYSTEM AND METHODS FOR SECURELY PERMITTING MOBILE
CODE TO ACCESS RESOURCES OVER A NETWORK

ABSTRACT OF THE DISCLOSURE

A system and methods are disclosed that permit mobile code, such as an applet,
5 to create a network connection with a content server on a network, without exposing the
client computer that is running the applet, or other computers with which the client
computer may communicate, to a DNS spoofing attack. This is achieved in accordance
with the principles of the present invention by using network restriction software in the
execution engine or runtime system under which the applet executes. When the applet
10 attempts to create a network connection to a content server, the network restriction
software checks a “name directory” on the content server for the presence of an entry
whose name corresponds to the name of the computer from which the applet was
downloaded. If such an entry is present, then the network restriction software permits
the network connection between the applet and the content server to be created. If not,
15 the applet may not create a network connection with the content server. Additionally,
address checks may be applied to assist in preventing DNS spoofing attacks from
succeeding.